CHAPTER Env-A 3700 NOx EMISSIONS REDUCTION FUND FOR NOx-EMITTING GENERATION SOURCES

Statutory Authority: RSA 125-J:14

PART Env-A 3701 PURPOSE AND APPLICABILITY

Env-A 3701.01 <u>Purpose</u>. The purpose of this chapter is to require NOx-emitting generation sources to report power generation and NOx emissions information, and to either acquire emissions reduction credit mechanisms, or to make direct payment of fees to the NOx emissions reduction fund.

Source. #7615, eff 12-20-01

Env-A 3701.02 <u>Applicability</u>. This chapter shall be applicable to NOx-emitting generation sources, as that term is defined in Env-A 3702, except as follows:

- (a) In accordance with RSA 125-J:13, III(a), this chapter shall not apply until November 18, 2007 to any NOx-emitting generation source that was issued a permit on or before July 1, 1999;
- (b) In accordance with RSA 125-J:13, III(b), this chapter shall not apply until November 18, 2005 to any NOx-emitting generation source that applied for a permit on or before May 1, 1999 but was issued a permit after July 1, 1999;
- (c) In accordance with RSA 125-J:13, III(c), any existing NOx-emitting generation source that is replaced by a NOx-emitting generation source with equal or less generating capacity that emits fewer pounds of NOx per kilowatt-hour than the NOx-emitting generation source it replaces, shall not be required to comply with this chapter until the applicable date for the existing source in (a) or (b) above;
- (d) In accordance with RSA 125-J:13, III(c), the emissions attributable to the increase in the amount of generating capacity, calculated pursuant to Env-A 3704 for any existing NOx-emitting generation source that is replaced by a NOx-emitting generation source with greater generating capacity that emits fewer pounds of NOx per kilowatt-hour than the NOx-emitting generation source it replaces, shall comply with this chapter at the time of replacement; and
- (e) Any NOx-emitting generation source that replaces an existing NOx-emitting generation source and emits more pounds of NOx per kilowatt-hour than the NOx-emitting generation source it replaces shall comply with this chapter at the time of replacement.

Source. #7615, eff 12-20-01

PART Env-A 3702 DEFINITIONS

Env-A 3702.01 "NOx-emitting generation source" means "NOx-emitting generation source" as defined in RSA 125-J:1, XIX-c, namely "any internal combustion engine or combustion turbine which generates electricity for use or sale, except for sources which meet the definition of a NOx budget source. NOx-emitting generation source shall not include any generators which:

- (a) Serve as an electrical or mechanical power source when the primary power source is unavailable;
- (b) Are used as a start-up or temporary supply of power to a facility which generates electricity for use or sale;

1

- (c) Are used as a portable generator;
- (d) Emit, in total from the facility, 5 tons of NOx or less per calendar year; or

(e) Are located in an area where electrical power is not reasonably or, considering the type of power needed by the user, reliably available."

Source. #7615, eff 12-20-01

Env-A 3702.02 "Portable generator" means a transportable mechanical apparatus used for the specific purpose of generating electricity to power the following:

- (a) Construction equipment such as, but not limited to, portable plants, compressors, signage, lighting, welding equipment, water pumping equipment, storage silos, and tools; and
 - (b) Non-construction uses such as, but not limited to, carnival games and rides and movie sets.

Source. #7615, eff 12-20-01

Env-A 3702.03 "Portable plant" means any nonmetallic mineral processing plant or asphalt plant that is mounted on any chassis or skids and can be moved by the application of a lifting or pulling force and which has no cable, chain, turnbuckle, bolt or other means, except electrical connections, by which any piece of equipment is attached or clamped to any anchor, slab, or structure, including bedrock, that must be removed prior to transporting the unit.

Source. #7615, eff 12-20-01

PART Env-A 3703 EXCLUSION CLAIMS

Env-A 3703.01 Claims of Exclusion from the Definition of NOx Emitting Generation Source.

- (a) The owner or operator of an applicable NOx-emitting generation source seeking to claim an exclusion from the definition of a NOx-emitting generation source pursuant to Env-A 3702.01(e) shall submit a written request for the exclusion to the division, providing the following information:
 - (1) The frequency of power outages during the previous 3 years;
 - (2) The duration of power outages during the previous 3 years;
 - (3) Any unusual business circumstances that warrant the exemption;
 - (4) Any unique power needs that warrant the exemption;
 - (5) The location of and distance to the nearest available power supply;
 - (6) A cost estimate from the local utility provider of the cost to provide power to the source; or
 - (7) Any other information that demonstrates that the NOx-emitting generation source is located in an area where electrical power is not reasonably, or considering the type of power needed by the user, reliably available.
- (b) In addition to (a) above, the owner or operator claiming an exclusion shall submit the following to the division:
 - (1) For a new source, all of the information required pursuant to Env-A 1703.01 and Env-A 1704.01; or
 - (2) For an existing source, the most recent permit number for either:
 - a. A state permit to operate in accordance with Env-A 608; or

- b. A Title V operating permit in accordance with Env-A 609.
- (c) Upon receipt of the information in (a) and (b) above, the division shall either:
 - (1) Accept the request and issue a finding that no permit is required for purposes of Env-A 3700; or
 - (2) Deny the request and require the owner or operator to submit either a new or amended permit application.

Source. #7615, eff 12-20-01

Env-A 3703.02 <u>Claims of Exclusion from NOx Reduction or Fee Requirements For Other Non-Electric Services.</u>

- (a) The owner or operator of an applicable NOx-emitting generation source seeking to exclude NOx emissions from the requirements of Env-A 3707 pursuant to RSA 125-J:13, I, shall submit a written request to the division, providing the following information:
 - (1) A monitoring plan for measuring and recording steam or other heat transfer media, in addition to power output;
 - (2) A proposed technology specific conversion factor for converting output attributable to the provision of other, non-electric services to megawatt-hours; and
 - (3) A technical analysis, including an energy balance, demonstrating qualification for the exemption.
- (b) If the information provided pursuant to (a) above is insufficient to allow the department to determine that the NOx emissions exceeding 7 pounds for each megawatt-hour of electricity produced are attributable to the provision of other, nonelectric services provided by the NOx-emitting generation source, the department shall request such additional information as is needed to make the determination.
- (c) In addition to (a) above, the owner or operator requesting to exclude NOx emissions shall submit the following to the division:
 - (1) For a new source, an application for a temporary permit in accordance with Env-A 607; or
 - (2) For an existing source, an application for either a state permit to operate in accordance with Env-A 608 or a Title V operating permit in accordance with Env-A 609.
 - (d) Upon receipt of the application and the written request, the division shall:
 - (1) Accept the request and issue a final action on the permit application; or
 - (2) Deny the request and issue a final action on the permit application.

Source. #7615, eff 12-20-01

PART Env-A 3704 NOx EMISSIONS CALCULATIONS

Env-A 3704.01 <u>Calculation of NOx Emissions for One or More NOx-Emitting Generation Sources</u> <u>Located at a Single Stationary Source</u>.

- (a) The owner or operator of one or more NOx-emitting generation sources located at the same stationary source shall combine the NOx emissions from all NOx-emitting generation sources when one NOx-emitting generation source is subject to this chapter.
- (b) Pursuant to RSA 125-J:13, I, a NOx-emitting generation source shall not be required to pay NOx emissions reduction fund fees for the first 7 pounds of NOx emitted for each megawatt-hour of electricity produced.
- (c) All NOx-emitting generation sources subject to (a) above, shall calculate average monthly emissions as follows:
 - (1) "E" means the total emissions applicable to fees in tons per month;
 - (2) "A1, A2, ..., An" means the actual NOx emissions as determined in accordance with Env-A 616 for each unit in tons per month;
 - (3) "B1, B2, ..., Bn" means the actual power generation of each unit in megawatt-hours of electricity produced per month;
 - (4) "C" means the NOx emissions rate in pounds of NOx emitted for each megawatt-hour of electricity produced per month that are attributable to the provision of other, non-electric services and that are exempted from the fee calculation in accordance with Env-A 3703.02; and
 - (5) E shall be equal to the sum of A1, A2, and An, minus the product of the sum of 7 and C and the sum of B1, B2, and Bn, divided by 2000 to convert from pounds to tons, as in the formula below:

$$E = (A1 + A2 + ... + An) - [(7 + C) \times (B1 + B2 + ... + Bn)]$$

$$2000$$

Source. #7615, eff 12-20-01

Env-A 3704.02 <u>Calculation of NOx Emissions for Replacement Sources With Increased Generation</u> Capacity.

- (a) Any NOx-emitting generation source that replaces an existing NOx-emitting generation source and emits fewer pounds of NOx per kilowatt-hour than the NOx-emitting generation source it replaces shall calculate the total NOx emissions attributable to the increase in the amount of generating capacity as follows:
 - (1) "E_{replace}" means the total emissions subject to fees in tons per month after the replacement;
 - (2) "E_{all}" means the total emissions from all NOx-emitting generation sources in tons per month after the replacement;
 - (3) "I" means the percentage increase in generation capacity from all NOx-emitting generation sources at the source:
 - (4) " MW_{old} " means the total generation capacity from all NOx-emitting generation sources before the replacement;
 - (5) " MW_{new} " means the total generation capacity from all NOx-emitting generation sources after the replacement; and
 - (6) $E_{replace}$ shall be equal to MW_{new} minus MW_{old} , divided by MW_{old} , multiplying that quotient by E_{all} , as in the formula below:

4

 $E_{replace} = (MW_{new} - MW_{old})/MW_{old} \times E_{all}$

Source. #7615, eff 12-20-01

PART Env-A 3705 POWER GENERATION MONITORING AND POWER GENERATION CALCULATIONS FOR NOx-EMITTING GENERATION SOURCES

Env-A 3705.01 <u>Power Generation Monitoring and Calculations</u>. The owner or operator of an applicable NOx-emitting generation source shall determine electrical or steam power generation by either of the following methods:

(a) By calculating actual electrical or steam power generation in megawatt hours by multiplying the heat input in million British thermal units obtained from fuel use records, by 0.10 megawatt hours/million British thermal units, as in the formula below:

$$\begin{array}{c} MMBTU \ _{(fuel \ use)} \ x \ 0.10 \ \underline{MWhr} \ \underline{} = MWhr \\ MMBTU \end{array}$$

or;

- (b) By monitoring electrical or steam power generation in accordance with the following:
 - (1) Any of the following monitors shall be used for monitoring electrical power generation in kilowatt-hours:
 - a. Solid-state kilowatt meters calibrated to within $\pm 10\%$ of reference readings in accordance with American National Standards Institute standard ANSI 12.16;
 - b. Rotating kilowatt meters calibrated to within $\pm 10\%$ of reference readings in accordance with American National Standards Institute standard ANSI 12.10;
 - c. Electromechanical kilowatt meters calibrated to within $\pm 10\%$ of reference readings in accordance with American National Standards Institute standard ANSI 12.10;
 - d. Current transformers or potential transformers calibrated to within $\pm 10\%$ of reference readings in accordance with American National Standards Institute standard ANSI C93.1 or Institute of Electrical and Electronic Engineers standard IEEE 57.13; or
 - e. Any alternative monitor as approved by the division in accordance with Env-A 3705.02;
 - (2) The following monitors, accurate to within $\pm 10\%$, shall be acceptable for monitoring steam power generation in millions of British thermal units output:
 - a. Pressure taps installed and maintained in accordance with American Society for Testing and Materials standard ASTM D1192-98;
 - b. Orifice plates installed and maintained in accordance with American Society for Mechanical Engineering standard ASME MFC-3M;
 - c. Turbine meters installed and maintained in accordance with American Society for Mechanical Engineering standard ASME MFC-4M;
 - d. Vortex meters installed and maintained in accordance with American Society for Mechanical Engineering standard ASME MFC-6M; or

- e. Any alternative monitor as approved by the division in accordance with Env-A 3705.02; and
- (3) All power generation monitors shall be operated and maintained in accordance with the operating and maintenance procedures specified by the manufacturer.

Source. #7615, eff 12-20-01

Env-A 3705.02 <u>Approval of Alternative Monitors</u>. For any monitor that is an alternative to a monitor specified by this part, the following procedure shall apply:

- (a) The person seeking approval of the alternative monitor shall submit to the director information that demonstrates that the alternative will result in records that are sufficient to demonstrate compliance with all applicable requirements and that the monitors are accurate to within $\pm 10\%$;
- (b) The director shall review the information submitted pursuant to (a) above, within 30 days of receipt, and approve the request if the alternative monitor meets the criteria specified in (a) above; and
- (c) If the director denies the request, the director shall notify the person in writing that made the request and specify the reason(s) for the denial.

Source. #7615, eff 12-20-01

PART Env-A 3706 RECORDKEEPING AND REPORTING REQUIREMENTS

Env-A 3706.01 Recordkeeping Requirements for NOx-Emitting Generation Sources.

- (a) The owner or operator of an applicable NOx-emitting generation source shall maintain calendar monthly records of actual NOx emissions in accordance with the methods set forth in Env-A 620.
- (b) The owner or operator of an applicable NOx-emitting generation source shall maintain calendar monthly records of power generation in accordance with the following:
 - (1) The measurements of power generation as output on an instrument recorder, if applicable, or as manually recorded on log sheets as part of a data collection procedure;
 - (2) The number of hours of operation of the NOx-emitting generation source;
 - (3) The number of hours of downtime of the power generation monitoring system, if applicable, during the time period when the NOx-emitting generation source is in operation;
 - (4) Fuel usage; and
 - (5) The frequency and results of calibrations performed, as applicable.

Source. #7615, eff 12-20-01

Env-A 3706.02 <u>Frequency of Reporting</u>. The owner or operator of any applicable NOx-emitting generation source shall submit annually to the division all information pursuant to Env-A 3706.01 by April 15 of the following calendar year. For 2000, if calendar year emissions of all applicable NOx-emitting generation sources located at the facility are greater than or equal to 5 tons, then the information for calendar year 2000 shall be submitted to the division on or before January 31, 2002.

Source. #7615, eff 12-20-01

Env-A 3706.03 <u>Reporting Requirements</u>. For each applicable NOx-emitting generation source, the owner or operator shall submit to the director, in accordance with the schedule in Env-A 3706.02, reports of the data required pursuant to Env-A 3706.01.

Source. #7615, eff 12-20-01

PART Env-A 3707 NOx EMISSIONS REDUCTION FUND FEES, PROCEDURES, AND USE

Env-A 3707.01 NOx Emissions Reduction Fund Fees.

- (a) In addition to the fees specified in Env-A 700, all applicable NOx-emitting generation sources shall pay to the division each year, starting in 2001 for NOx emitted in 2000, a NOx emissions reduction fund fee as calculated pursuant to Env-A 3707.03.
- (b) In lieu of the fee specified in (a) above, for each ton of NOx which would otherwise require payment of fees, the owner or operator of a NOx-emitting generation source may acquire and use the following emission reduction credit mechanisms for compliance with this chapter:
 - (1) Emissions reduction credits in accordance with Env-A 3000;
 - (2) Discrete emissions reductions in accordance with Env-A 3100; or
 - (3) NOx budget allowances in accordance with Env-A 3200.

Source. #7615, eff 12-20-01

Env-A 3707.02 <u>Methods Used to Calculate NOx Emissions Reduction Fund Fees.</u> The owner or operator of an applicable NOx-emitting generation source shall submit to the director with each emission reduction fund fee payment a description of the method used to calculate actual emissions with each emission reduction fund fee payment.

Source. #7615, eff 12-20-01

Env-A 3707.03 Calculation of NOx Emissions Reduction Fund Fees.

- (a) The NOx emissions reduction fund fee shall be calculated in accordance with RSA 125-J:13, II(b).
- (b) The dollars per ton fee shall be multiplied by the NOx emissions reduction fund multiplier to determine the NOx emissions reduction fund fee in dollars per ton as set forth in table 3707-1 below:

<u>Table 3707-1</u> NOx Emissions Reduction Fund Fees in Dollars per Ton

Year	Time Period	Dollar per	NOx	NOx
		ton fee	Emissions	Emissions
			Reduction	Reduction
			Multiplier	Fund Fee
				in Dollars
				Per Ton
2000	Jan 1, 2000 to April 30, 2000	100	1	100
	May 1, 2000 to June 30, 2000	200	1	200
	July 1, 2000 to September 30, 2000	200	2	400
	October 1, 2000 to December 31, 2000	100	2	200

2001	Jan 1, 2001 to April 30, 2001	100	2	200
	May 1, 2001 to June 30, 2001	200	2	400
	July 1, 2001 to September 30, 2001	200	3	600
	October 1, 2001 to December 31, 2001	100	3	300
2002	Jan 1, 2002 to April 30, 2002	100	3	300
	May 1, 2002 to June 30, 2002	200	3	600
	July 1, 2002 to September 30, 2002	200	4	800
	October 1, 2002 to December 31, 2002	100	4	400
2003	Jan 1, 2003 to April 30, 2003	100	4	400
	May 1, 2003 to June 30, 2003	200	4	800
	July 1, 2003 to September 30, 2003	200	5	1000
	October 1, 2003 to December 31, 2003	100	5	500
2004 and	Jan 1 to April 30	100	5	500
Beyond				
	May 1 to September 30	200	5	1000
	October 1 to December 31	100	5	500

(c) To calculate the NOx emissions reduction fund fee, the total tons of NOx emissions calculated in accordance with Env-A 3704 shall be multiplied by the NOx emissions reduction fund fee in dollars per ton in accordance with (b) above.

Source. #7615, eff 12-20-01

Env-A 3707.04 <u>Payment of NOx Emissions Reduction Fund Fee</u>. All applicable NOx-emitting generation sources shall pay to the department the NOx emissions reduction fund fee annually, in accordance with the schedule specified in Env-A 705.04 for emission-based fees.

Source. #7615, eff 12-20-01; ss by #8314, eff 3-26-05

Env-A 3707.05 <u>Notification for NOx Emissions Reduction Fund Fees</u>. The division shall notify the applicable NOx-emitting generation sources of any under payments or over payments of the NOx emissions reduction fund fee.

Source. #7615, eff 12-20-01

Env-A 3707.06 Procedures for Use of NOx Emissions Reduction Fund Fees. The department shall:

- (a) Issue annually, on or before January 15, a proposal for the use of fund moneys consistent with RSA 125-J:13, II(c);
- (b) Publish once in a newspaper of daily statewide circulation a public notice of the proposal specified in (a), above, offering the opportunity for a hearing;
 - (c) If a public hearing on the proposal specified in (a), above, is requested:
 - (1) Publish a notice in a newspaper of daily statewide circulation providing the place, date, and time at least 30 days prior to conducting the hearing; and
 - (2) Conduct the hearing in accordance with Env-C 205; and
 - (d) Issue a final determination:
 - (1) If no public hearing is requested, within 30 days of the publication of the public notice on the proposal; or

(2) If a public hearing is requested, within 60 days of the public hearing on the proposal.

Source. #7615, eff 12-20-01; ss by #8314, eff 3-26-05

Env-A 3700

9

APPENDIX

Provision of the Proposed Rule	Specific State Statute the Rule is Intended to			
	Implement			
Env-A 3701.01	RSA 125-J:13			
Env-A 3701.02(a)	RSA 125-J:13,III(a)			
Env-A 3701.02(b)	RSA 125-J:13,III(b)			
Env-A 3701.02(c)-(f)	RSA 125-J:13,III(c)			
Env-A 3702.01	RSA 125-J:1,XIX-c			
Env-A 3702.02, Env-A 3702.03	RSA 125-J:1,XIX-c(c)			
Env-A 3703.01	RSA 125-J:1,XIX-c(e)			
Env-A 3703.02	RSA 125-J:13,I			
Env-A 3704.01	RSA 125-J:13,I, RSA 125-J:14,I			
Env-A 3704.02	RSA 125-J:13,III(c)			
Env-A 3705.01, Env-A 3705.02	RSA 125-J:13,I, RSA 125-J:14,I			
Env-A 3706.01, Env-A 3706.02, Env-A 3706.03	RSA 125-J:13,I, RSA 125-J:14,I			
Env-A 3707.01(a)	RSA 125-J:13,II(a)			
Env-A 3707.01(b)	RSA 125-J:13,I			
Env-A 3707.02	RSA 125-J:13,I, RSA 125-J:14,I			
Env-A 3707.03(a)-(c)	RSA 125-J:13,II(b)			
Env-A 3707.04, Env-A 3707.05	RSA 125-J:14,II			
Env-A 3707.06	RSA 125-J:13,II(c), RSA 125-J:14,II			